

03050109-160

(Little River)

General Description

Watershed 03050109-160 is located in Laurens and Newberry Counties and consists primarily of the **Little River** and its tributaries. The watershed occupies 147,154 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Pacolet-Madison-Herndon series. The erodibility of the soil (K) averages 0.28 and the slope of the terrain averages 15%, with a range of 2-40%. Land use/land cover in the watershed includes: 71.3% forested land, 20.2% agricultural land, 4.4% barren land, 3.6% urban land, 0.3% forested wetland (swamp), and 0.2% water.

The Little River accepts drainage from Reedy Fork Creek in the City of Laurens and Burnt Mill Creek (Scout Branch) enters the river further downstream. North Creek, Beaverdam Creek, and Simmons Creek drain into the Little River next followed by Garrison Creek, Sandy Run Creek (Reeder Branch), Mechanic Creek, Mudlick Creek (Campbell Creek, North Campbell Creek, Mill Creek, Watkins Creek, Mills Creek, Pages Creek), Davenport Branch, Stephens Creek, and Turners Branch. There are a total of 244.5 stream miles and 178.8 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
S-034	P/W	FW	LITTLE RIVER AT U.S. BUS 76, IN LAURENS ABOVE WWTP
S-297	S/W	FW	LITTLE RIVER AT S.C. ROUTE 127
S-135	S/W	FW	NORTH CREEK AT U.S. 76, 2.8 MILES W OF CLINTON
S-038	W	FW	LITTLE RIVER AT S.C. 560
S-100	BIO	FW	LITTLE RIVER AT SR 48
S-099	S/SPRP	FW	LITTLE RIVER AT S-36-22, 8.3 MILES NW OF SILVERSTREET
S-305	W	FW	LITTLE RIVER AT S.C. 34

Little River - There are six SCDHEC monitoring sites along the Little River. At the furthest upstream site (**S-034**), aquatic life uses are fully supported. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions. Further downstream (**S-297**), aquatic life uses are again fully supported. A significant increasing trend in dissolved oxygen concentration and a significant decreasing trend in five-day biochemical oxygen demand suggest improving conditions for these parameters. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Recreational uses are not supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria suggests improving conditions for this parameter.

At the next site downstream (**S-038**), aquatic life uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are fully supported, and a significant decreasing trend in fecal coliform

bacteria suggests improving conditions for this parameter. Aquatic life uses are fully supported further downstream (*S-100*) based on macroinvertebrate community data.

At the next station downstream (*S-099*), aquatic life uses are again fully supported, and significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentration suggests improving conditions for these parameters. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Recreational uses are fully supported at this site. At the furthest downstream site (*S-305*), aquatic life uses are partially supported due to pH excursions. Recreational uses are fully supported, and a significant decreasing trend in fecal coliform bacteria suggests improving conditions for this parameter.

North Creek (S-135) - Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Aquatic life uses are fully supported. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration and a significant decreasing trend in five-day biochemical oxygen demand suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions. In addition, there is a significant increasing trend in fecal coliform bacteria.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
LITTLE RIVER COMM. OF PUBLIC WORKS/LAURENS PIPE #: 001 FLOW: 4.500	SC0020702 MAJOR DOMESTIC
LITTLE RIVER WR GRACE & CO./HUDGENS MINE PIPE #: 001 FLOW: M/R	SCG730030 MINOR INDUSTRIAL
DITCH TO LITTLE RIVER INTERNATIONAL PAPER/SILVERSTREET PIPE #: 001 FLOW: M/R	SC0022730 MINOR INDUSTRIAL
REEDY FORK CREEK CITY OF LAURENS WTP PIPE #: 001 FLOW: M/R	SCG645006 MINOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME FACILITY TYPE</i>	<i>PERMIT # STATUS</i>
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ALSIMAG (GE CERAMICS)
INDUSTRIAL

IWP-123

LAURENS COUNTY
DOMESTIC

301001-1101 (DWP-050)
CLOSED

CITY OF LAURENS DUMP
DOMESTIC

CLOSED

Land Applications

*LAND APPLICATION
FACILITY NAME*

*PERMIT #
TYPE*

SPRAYFIELD
DOUBLE M FARMS

ND0078191
DOMESTIC

SPRAYFIELD
ISE NEWBERRY, INC.

ND0078158
INDUSTRIAL

Mining Activities

*MINING COMPANY
MINE NAME*

*PERMIT #
MINERAL*

WR GRACE & CO.
HUDGENS MINE

0749-59
VERMICULITE

WR GRACE & CO.
LEONARD MINE

0835-59
VERMICULITE

WR GRACE & CO.
CUNNINGHAM

1226-59
VERMICULITE

CAROLINA VERMICULITE COMPANY, INC.
KENNETH HANNA MINE

0642-59
VERMICULITE

CAROLINA VERMICULITE COMPANY, INC.
WL PATTERSON MINE

1130-59
VERMICULITE

CAROLINA VERMICULITE COMPANY, INC.
VERENES TRACT

1111-59
VERMICULITE

SOUTHERN BRICK COMPANY
SPIGNER MINE

0828-71
CLAY

Water Quantity

*WATER USER
STREAM*

*REGULATED CAPACITY (MGD)
PUMPING CAPACITY (MGD)*

CITY OF LAURENS CPW
REEDY FORK CREEK

1.5
3.5

Growth Potential

This watershed contains most of the City of Laurens and portions of the Towns of Watts Mill, Mountville, Crosshill, and Silverstreet. The City of Laurens is located in the northern portion of this watershed and has a high potential for growth. Factors that influence this growth include two major rail lines, U.S. 221, U.S. 76, and I-385. The Laurens County Industrial Park is a growth area in the predominately rural southern portion of the watershed. A large plastics plant is building in the watershed, near Laurens off S.C. 72, and should add to the industrial growth in the area.

Watershed Protection and Restoration Strategies

Special Projects

Assessing Water Quality in the Saluda River Watershed

Furman University has recently completed a three-year project that was to determine the sources of impairments on several tributaries and reaches of the Saluda River. These impairments include high fecal coliform counts detected in the watersheds of the Middle Saluda River, the South Saluda River, a small tributary to the Saluda River north of the Town of Pelzer, Broad Mouth Creek, Big Brushy Creek, the Bush River, Scotts Creek, and the **Little River**; high phosphorous concentrations found in the Bush River; low dissolved oxygen levels in Coronaca Creek; and an impaired macroinvertebrate community in Broad Mouth Creek. A stream sampling program was conducted in 2001, 2002, and 2003 with 182 sites sampled within the ten impaired areas. Each site was sampled from 3 to 7 times for water chemistry and for total coliform, *E. coli*, and heterotrophic bacterial counts. In addition, selected sites were sampled for fish abundance and diversity and for macroinvertebrate abundance and diversity.